FISHERIES RESEARCH BOARD OF CANADA

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An Up-to-Date Ice Chisel for Fishermen

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In many winter fisheries in Canada the cutting of holes to set gear under the ice is a very important part of the work. Axes are suitable only when the ice is thin or for cleaning out the thin ice which forms in the holes between one hauling of the gear and the next. When the ice is thick the axe handle soon hits the upper edge of the hole and when the hole fills with water each stroke gives the fisherman a shower bath. Even in thin ice a good chisel can make neater holes and, for example, more easily make them the right size for the "toggle" sticks which keep hauling lines in place.

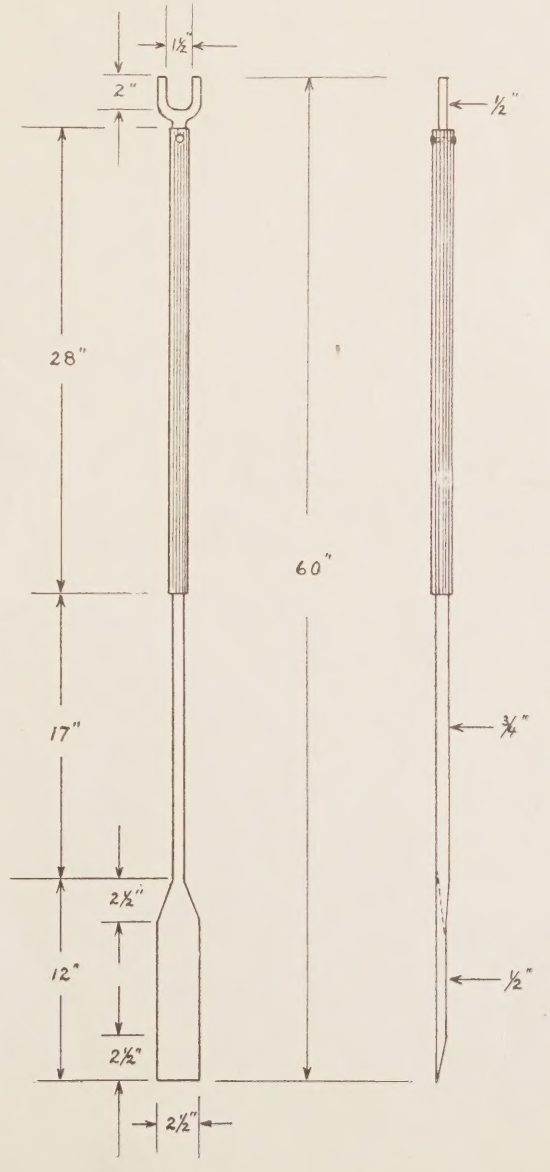
The smelt fishery of the Miramichi estuary in north-eastern New Brunswick has for many years meant the cutting of thousands of holes in ice up to 3 feet thick. As many as ten to fifteen holes are necessary to set some types of box-nets and some fishermen have as many as twenty nets. In this fishery and elsewhere necessity has led to the invention of many styles of chisels. One of the best is described here for the benefit of fishermen generally. It was developed about seven years ago by C. W. MacDonald, a blacksmith of Loggieville, N. B. He substituted a rubber-covered iron handle for the older clumsier wood which had to be too large to grasp easily and iced up badly. He also put a crutch on the handle for use in freeing lines from the ice.

How the chisel is made. The drawing shows the dimensions of the new chisel. The total length is 4¾ to 5 feet. A crutch of ⅝-inch stock with a spread of 2½ inches and an inside depth of 2 inches is welded to the upper end of the handle. The latter is of ¾-inch round iron about 3½ feet long. About 2½ feet of corrugated garden hose is fitted tightly around the upper part of the handle. The blade is of ½-inch steel 2½ inches wide and about a foot long. It is sharpened with a long bevel of about 2½ inches and tempered to give a hard cutting edge.

Weight. Such a chisel weighs about 9 pounds and is just heavy enough to cut ice with minimum effort.

Rubber-covered handle. Experience has shown that the hose does not ice up badly. It is small enough (1⅛" in diameter) to grip firmly in mittened hands and, being corrugated, can be kept from slipping or turning.

Crutch for freeing lines. On the Miramichi small pieces of board are used on top of lines where they leave holes in the ice to protect them from freezing in badly or being cut by the chisel when the ice is cleared from the holes. The crutch is used to free lines which are partially frozen in by forcing it between the line and the ice. This method has prevented many lines from being cut in clearing the holes of ice, and saved the work of running them under the ice again.



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